



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/982,243

10/16/2001

Ashish Prakash

5693P006X

8578

48102 7590 11/27/2007
NETWORK APPLIANCE/BLAKELY
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT

PAPER NUMBER

2145

MAIL DATE

DELIVERY MODE

11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/982,243	PRAKASH ET AL.	
	Examiner	Art Unit	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 23, 25-34, 36, 38, 39 and 46-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 23, 25-34, 36, 38-39, and 46-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This office action is in response to the correspondence received on September 10, 2007.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 23, 25-34, 36, 38-39 and 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Abraham et al (US Patent No: US005983270A), hereafter referred to as Abraham.

1. With regards to claim 21, Abraham teaches a device to log information in a network cache, the device comprising: an application module (*equivalent to network management program; see column 2, lines 30-32, Abraham*) to receive requests from a plurality of clients (*equivalent to devices within the intranet and see element 44 within Figure 2, Abraham*) for content maintained by an origin server (*equivalent to devices within the internet and see element 40 within Figure 2, Abraham*) and to receive responses to the requests from the origin server (*inherent feature in a network yet is also taught within column 2, lines 31-53, Abraham*); an interface to allow selection of a protocol, selection for logging of

some or all of a plurality of fields of the protocol that may be present in each of said requests and responses (*see column 14, lines 9-28, Abraham*), and specification of a sequence in which the selected fields are to appear in a log file (*see column 7, lines 29-31, Abraham*); and a log module to record information of the received requests and response into the log file, according to the selected protocol, the selected fields of the protocol, and the specified sequence (*see column 15, lines 34-40, Abraham*).

2. With regards to claim 23, Abraham teaches the device wherein the interface allows the creation of new fields in addition to the plurality of fields (*see element 230, Figure 7A, Abraham*).
3. With regards to claim 25, Abraham teaches the device wherein the interface is a graphical user interface (*see column 14, line 11, Abraham*).
4. With regards to claim 26, Abraham teaches the device wherein the interface is a command line interface (*equivalent to low level commands; see column 53, lines 15-23, Abraham*).
5. With regards to claim 27, Abraham teaches a method of logging information in a network cache, the method comprising: receiving requests from a plurality of clients (*equivalent to devices within the intranet and see element 44 within Figure*

2, Abraham) for content maintained by an origin server (*equivalent to devices within the internet and see element 40 within Figure 2, Abraham*); receiving responses to said requests from the origin server (*inherent feature in networks yet is also taught within column 2, lines 31-53, Abraham*); receiving inputs via an interface (*equivalent to network management program; see column 2, lines 30-32, Abraham*) to make selection for logging of some or all of a plurality of fields that may be present in each of said requests and responses and to make specification of a sequence in which the selected fields are to appear in a log file (*see column 14, lines 9-28, Abraham*); storing in a first data structure a value indicating the position in the specified sequence of each selected field (*Abraham's design allows for sorting; see column 7, lines 29-31, Abraham*); in response to receiving each of the request and responses, obtaining information for each selected field associated with the corresponding request or response and storing the information in a second data structure, in a sequence independent of the specified sequence, storing in a third data structure, based on the first data structure, a reference to the information for each selected field stored in the second data structure, including storing each reference in a location of the third data structure that corresponds to the position in the specified sequence of the corresponding field; and using the third data structure to output the information for each selected field in the second data structure to a log file, such that the information for each selected field appears in the log file according to the specified sequence (*see column 15, lines 34-40, Abraham*).

6. With regards to claim 28, Abraham teaches the method wherein the interface allows creation of new fields in addition to the plurality of fields (*see element 230, Figure 7A, Abraham*).
7. With regards to claim 29, Abraham teaches the method wherein the information for each field is converted to an ASCII representation and is of variable length (Huckins allows the data to be displayed in ASCII (*equivalent to low-level command; see column 53, lines 15-23, Abraham*)).
8. With regards to claim 30, Abraham teaches the method wherein each location in the first data structure is pre-initialized to contain a flag before the specified sequence is stored, the flag to be utilized as an indicator that the corresponding field was not selected for logging (*see column 13, lines 30-33, Abraham*).
9. With regards to claim 31, Abraham teaches the method wherein the second data structure and the third data structure are created to respond to logging for the corresponding request or response and destroyed once logging for the corresponding request or response is completed (*It is inherent that new records (equivalent to the claimed data structures) are created when needed. Abraham teaches the claimed trait within the flowchart presented in figure 7A by element 246*).

10. With regards to claim 32, Abraham teaches the method wherein the first data structure persists through logging for the requests and responses (*Abraham's design allows for records to only be modified if needed; see element 246 of the flowchart within Figure 7A*).
11. With regards to claim 33, Abraham teaches the method wherein using the third data structure to output the information further comprises sequentially accessing the third data structure to read the position of the information corresponding to each selected field and accessing the second data structure to read information corresponding to each selected field at the position indicated by the reference (*see elements 246 and 254 within the flowchart in Figure 7A, Abraham*).
12. With regards to claim 34, Abraham teaches a device for logging information in a network cache, the network cache serving a plurality of clients (*equivalent to devices within the intranet and see element 44 within Figure 2, Abraham*) on behalf of an origin server (*equivalent to devices within the internet and see element 40 within Figure 2, Abraham*), the device comprising: an interface to allow selection of a protocol, selection for logging of some or all of a plurality of fields of a message to be received from anyone of the origin server and the plurality of clients, the fields corresponding to the selected protocol (*see column 14, lines 9-28, Abraham*), and specification of a sequence in which the selected

fields are to appear in a log file of the network cache, wherein the interface further allows changing said selections to modify the log file's format while the network cache is running (*see column 7, lines 29-31, Abraham*); a protocol specific application module to obtain information for each selected field associated with the message (*equivalent to network management program; see column 2, lines 30-32, Abraham*); a protocol independent log module to receive information for each selected field from the protocol specific application module and to store the information for each selected field in the log file in the sequence specified (*see column 15, lines 34-40, Abraham*).

13. With regards to claim 36, Abraham teaches the device wherein the interface allows creation of new fields in addition to the plurality of fields (*see element 230, Figure 7A, Abraham*).

14. With regards to claim 38, Abraham teaches the device wherein the interface is a graphical user interface (*see column 14, line 11, Abraham*).

15. With regards to claim 39, Abraham teaches the device wherein the interface is a command line interface (*equivalent to low level commands; see column 53, lines 15-23, Abraham*).

16. With regards to claim 46, Abraham teaches the device wherein the interface further allows changing said selections to modify the log file's format while the network cache is running (*Within Figure 7A, it is shown how modifications can be made without shutting down the application*).
17. With regards to claim 47, Abraham teaches the method wherein the interface allows changing the selection and the sequence to modify the log file's format while the network cache is running (*see column 7, lines 29-31, Abraham*).
18. With regards to claim 48, Abraham teaches a method of operating a network cache, the method comprising: receiving requests from a plurality of clients (*equivalent to devices within the intranet and see element 44, in Figure 2, Abraham*) for contents maintained by a server (*equivalent to devices within the internet and see element 40 within Figure 2, Abraham*) and responses to the requests from the server (*inherent feature in a network yet is also taught within column 2, lines 31-53, Abraham*), wherein the requests and responses are formatted according to a protocol; receiving selection of a first number of fields from a plurality of fields of the protocol that may be present in each of the requests and responses (*see column 14, lines 9-28, Abraham*), and receiving specification of a first sequence in which the first number of fields are to appear in a log file of the network cache; recording the first number of fields extracted from a first one of the requests and responses into the log file according to the

first sequence (*see column 7, lines 29-31, Abraham*); while operating the network cache, receiving inputs that changes selection of fields from the first number of fields to a second number of fields and specifies a second sequence; recording the second number of fields extracted from a second one of the requests and responses into the log file according to the second sequence (*see column 15, lines 31-40, Abraham*).

19. With regards to claim 49, Abraham teaches the method wherein recording the first number of fields extracted from a first one of the requests and responses into the log file according to the first sequence comprises: storing in a first data structure a value indicating the position in the first sequence of each of the first number of fields; obtaining information for each of the first number of fields associated with the first one of requests and responses and storing the information in a second data structure, in a sequence independent of the first sequence, storing in a third data structure, based on the first data structure, a reference to the information for each of the first number of fields stored in the second data structure, including storing each reference in a location of the third data structure that corresponds to the position in the first sequence of the corresponding field; and using the third data structure to output the information for each of the first number of fields in the second data structure to the log file, such that the information for each of the first number of fields appears in the log

file according to the first sequence (*see elements 246 and 254 within the flowchart in Figure 7A, Abraham*).

Response to Arguments

Applicant's arguments with respect to claims 21, 23, 25-34, 36, 38-39 and 46-49 have been considered but are moot in view of the new ground(s) of rejection. In addition, the applicant remarks within the correspondence received on 9/10/07 that the non-responsive sent on 8/23/07 was improper because the examiner failed to mention the requirement for an interview in the final office action mailed on 4/5/07. This assertion is incorrect because the non-response was mailed by the examiner in lieu of the improper interview request made by the applicant within the 7/2/07 correspondence. Within the 7/2/07 correspondence, the applicant wrote in bold on p. 9,

49 have been newly added. No new matter has been added. Applicants hereby respectfully request a telephone interview with the Examiner to be held before the Examiner's issuance of an office action in response to this RCE.

Since no proper interview request was made, a non-responsive was sent. However, in lieu of the latest remarks, it is assumed that no interview is being requested by the applicant hence, a new search and office action have been created.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./

/Jason D Cardone/
Supervisory Patent Examiner,
Art Unit 2145